



EVERY TUESDAY

# CHILDREN'S NEWSPAPER

FOUNDED BY ARTHUR MEE

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## BISHOP OF THE BUSH

### A Brave Leader Home From the Pacific

DR WALTER BADDELEY, newly-appointed Bishop of Whitby, comes home from his diocese of Melanesia after many years of journeying in southern seas. Adventurous years they were, too, for when the Japanese began their attack on the Solomon Islands Dr Baddeley, who in the 1914-18 war won the DSO and the MC with Bar, decided that he would remain at his post, ministering to the needs of his people, at all costs.

The Bishop had been there since 1932 and had nosed his way into all the harbours and creeks of Guadalcanal and the other islands. In April 1941 the Bishop watched the Japanese bombing of Tulagi from his headquarters bungalow on Gela Island, and in the darkness of the night he crossed the strip of 27 miles of sea to Malaita in his open launch to see the British Resident Commissioner. It was one of the worst journeys he ever had. Coming back to his post the Bishop's Melanesian boys ran the launch into the mangroves, and so well camouflaged was she that Japanese patrols passing close by never spotted her.

By secret messenger the Bishop kept in touch with the mission staff on the various islands, but as the Japanese got nearer his own village he had to keep on the move. His simple bungalow was abandoned. Dressed in shorts and open shirt, the Bishop took to the bush and lived among the villagers.

As the Americans came in to attack the Japanese positions the Bishop was able to give them valuable information. Crossing by night from Guadalcanal a man from the Bishop's hiding-place visited Halavo Island and trekked among the Japanese garrison, noting their numbers and equipment, anti-aircraft guns, and coastal defences, and



Dr Baddeley  
(From the official story of the Pacific war, Among Those Present)

he spotted how many buoys were in the bay for seaplane anchorage.

All through 1942 and 1943 boys from the Melanesian mission school moved about silently across the bays and inlets carrying messages, making observations about coastal defences and giving the American forces much-needed information.

On one occasion coming out from Holy Communion in his secret hiding-place the Bishop was met with the cry "Bishop, many ships come!" Japanese cruisers and destroyers steamed into the bay, and immediately overhead roared a squadron of American Fortresses. A fierce battle followed which ended in the Japanese ships limping away. The Bishop and the Solomon Islanders watched it all.

American soldiers, says the Bishop, won the hearts of the islanders by their friendliness and by their appreciation of what

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## South Africa's Ghost Train

### A MYSTERY EXPLAINED

For the past two months a "ghost" train has been crawling in and out of South African stations, prowling across the karroo, banking up steep mountain sides, and "hush-hushing" its way through the native territories of the Transkei, writes our South African correspondent.

The train travels mostly at night, and complete secrecy surrounds its movements. In spite of its great length, 1064 feet, and its weight, over a thousand tons, it has no fare-paying passengers on board. And as it noses its way out of a hidden railway siding, watched by crowds of gaping native peasants, it sets out on the next stage of its mysterious journey.

### Testing the Track

What is the explanation? It is a special train which is testing every mile of the journey that the King and Queen will follow in next month's Royal tour of South Africa. It is an exact replica of the train that their Majesties will use, and it has on board some of the highest officials of the South African Railways, also a quantity of the most delicate apparatus for testing, measuring, and recording.

There are, for example, a dynamometer coach to record the power of the various engines used, a machine to register graphically the characteristics of the track, an air-conditioned saloon for recording air pressures, and also a host of intricate machinery to register incline, deviation, and other matters.

South Africa boasts some of the loveliest mountain scenery in the world, and the railways that traverse many of these places are the result of great engineering feats. That is why the Railways Administration is leaving no stone unturned to make the visit of their Majesties as pleasant and as safe as possible.

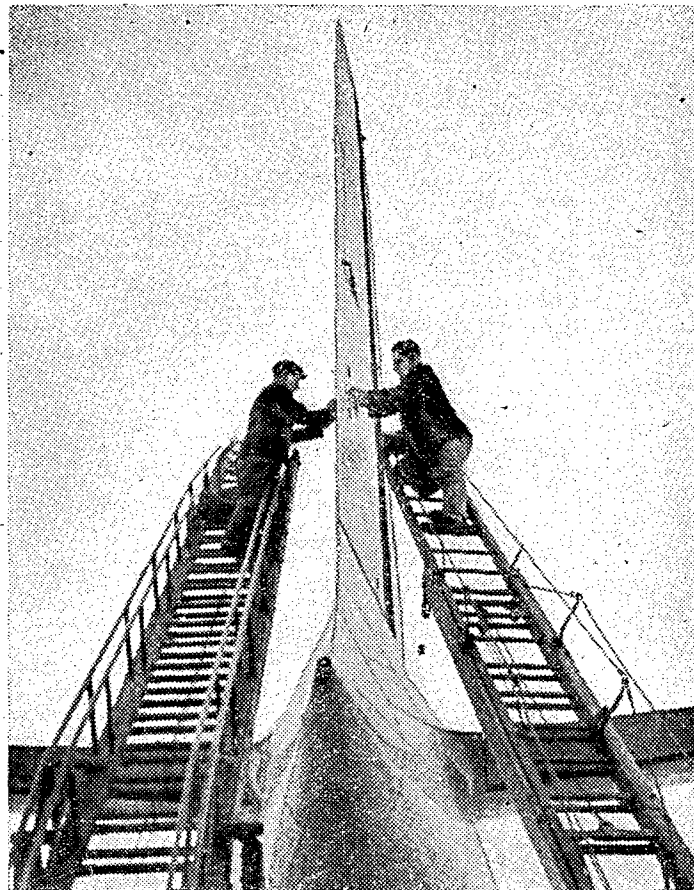
## BISHOP OF THE BUSH

Continued from previous column

the mission was doing in the islands. They were surprised to see over sixty Solomon Islands' clergy, and also native medical practitioners. Most visitors were eager to see the hospital and its patients. A young New Zealand airman wrote this about his visit: "The little clinic was crowded with patients, and the queue seemed never-ending as it stretched out the door, past the little veranda, and quite some distance along the path beyond. Many of the natives who came for treatment belonged to the heathen bush tribes away up in the hills."

On Guadalcanal the Melanesian people will always remember their wartime visitors by the lovely memorial which the Bishop recently visited. It is a chapel, 90 feet by 26, built of matting

## A TALL TAIL



Long extending ladders are needed by these fitters to reach the rudder of one of the new Solent flying-boats built at Rochester for the Far East service of B.O.A.C.

## THE MIGHTY FORCE OF A WAVE

### An Earthquake on the Ocean Bed

WE are still hearing of the so-called "tidal wave" that followed the earthquake by which Japan was smitten not long ago. Photographs since published show that the mighty inrush of water was as destructive as bombs dropped on Germany during the recent war.

The destroying agent was not a tidal wave, however. It

was what is known as a seismic wave, which is in no way related to winds or tides but the result of an earthquake originating in the ocean bed. Such a convulsion not only causes the solid earth in the vicinity to heave to and fro but so agitates the waters that they are hurled with terrific violence against the land which the wave eventually reaches.

A seismic wave has been known to rise to a height of 100 feet and more. It advances like a solid wall of water on the land, destroying buildings and either sinking or overturning ships or carrying them bodily inland. Storm waves on our western coast, whose violence has been measured, are found to exert a pressure on impact of as much as three-and-a-half tons to the square foot. Such waves tear out from our sea defences blocks of masonry each weighing over 40 tons.

But so far, however, no one has ever had an opportunity of measuring the far greater striking force of the seismic wave. Water in such force and volume destroys all life in the area over which it is hurled. The effects of a tidal wave are relatively insignificant compared with those of such a wave as reached Japan in the wake of the recent earth convulsion.

## STANDING ROOM ONLY



The driver must have had to rely on his enthusiastic passengers for information and advice about steering this jeep. The picture comes from Loges Camp, near Paris, where Scouts from many countries have been holding a congress.



## THE OLD WORLD DRIVES THE NEW

### Power That Comes From Ancient Lands

A VITAL need of every nation today is an ample supply of fuel. Most of the world's transport on land, at sea, and in the air depends on oil, and that is why a recent agreement concerning oilfields in Persia is of great importance.

The civil and military air fleets of all nations depend on aviation spirit, the finest product obtained by refining crude oil. Enormous fleets of lorries and cars are driven by petrol. Millions of engines in ships, in electricity-generating motors, and in railway and other transport vehicles are fed by diesel oil. Every moving part in every vehicle and machine requires lubricants which come from oil.

It has been estimated that in the United States alone the work performed by petroleum every day is equal to the work of some 4500,000,000 people, or about twice the population of the globe. So it is clear that our modern civilisation could not exist without oil and its many offsprings, or derivatives as they are scientifically called.

#### Limited Supplies

But oil does not exist in inexhaustible quantities. There are various estimates of the amount of oil available in the various continents and of the rate at which this oil will be consumed.

In the U.S. shortage of oil is feared within a relatively short time. So the great American oil companies look to other continents possessing vast "proved" reserves of oil, with a view to keeping them in readiness for future development. But above all it is the military and naval authorities of the United States who are anxious not to deplete their own country's resources of crude oil too quickly. The important duties imposed upon the Great Powers by the United Nations' Charter force them to be read to fulfil effectively their possible military and naval tasks.

Britain, whose great industrial machine also needs vast quantities of oil, and whose Navy depends almost exclusively on oil fuel, has been forced to seek foreign sources of oil. In a way our country has been in greater need of foreign oil than the United States because of the poverty of natural oil resources in these isles.

Taking these great needs into account, it is not surprising that

the recent agreement has roused great interest. The Middle East oil-bearing countries, Persia, Iraq, Saudi Arabia, Kuwait, Bahrain Island, and Qatar, are fabulously rich in oil. And because of the ease with which the oil is located few drillings are needed. This means that oil obtained there is cheap. Transportation of oil across vast lands by means of pipelines cheapens this fuel still further.

According to the agreement signed the other day the important Standard Oil Company of New Jersey will buy, over a period of 20 years, crude oil from the Anglo-Iranian Oil Company, which is a British-Government-controlled concern operating vast fields in southern Persia. The Standard Oil Company has also agreed to contribute to the building of a pipeline to conduct Persian oil to the Mediterranean.

Another agreement, which only indirectly affects Britain, has been made between the Standard Oil Company and the Arabian-American Company of Saudi Arabia. This promises to help the latter company to develop its great oil reserves and to contribute to the building of a second, more southerly, pipeline linking the Persian Gulf with the Eastern Mediterranean.

#### Fuel For Europe

The significance of these agreements lies in a number of spheres. Politically, it means that the U.S. is now committed to protect, with Britain, the vast oil reserves in the Middle East. Economically, the agreements may provide a welcome source of dollars to the countries of the Middle East, which still have to travel a long road to modernisation, and increase the stock of precious dollars held by this country. Further, the oil which may soon start flowing in large quantities to the Eastern Mediterranean is likely to be sold cheaply to the devastated European countries. And there are few things Continental Europe needs more today, for its rebuilding than abundant supplies of liquid fuel.

## A Canterbury Puzzle

THE figure of a man swinging 90 feet aloft in Canterbury Cathedral has recently provided a puzzle for visitors.

He is 84-year-old Samuel Caldwell, the last of a line of stained-glass experts, who is superintending the replacing of windows of Thomas à Becket.

At the beginning of the war a telegram from the Dean of Canterbury sent Samuel and his five men to the heights of the cathedral to take down the priceless 12th-century windows and store the pieces in the crypt. He made no notes, preferring to remember where each piece goes. So in his mind alone is the key to this huge stained-glass jigsaw puzzle.

## Ice-Bolts From the Blue

THE great hailstorm that recently descended on Sydney, in the height of the Australian summer, caused such astonishment that news of it was cabled and wirelessed throughout the world. From the very skies that multitudes of holidaymakers were enjoying came ice-bolts from the blue, as we might say. The hailstones were of all sizes, up to jagged frozen masses weighing as much as four-and-a-half pounds each. They injured scores of people, and caused great damage to property.

Hail, as old as the atmosphere, and still one of the marvels of Nature not wholly explained, occurs most frequently in hot climates, and at the hottest part of the day, as an accompaniment to thunderstorms.

#### How They Are Formed

It seems that vapour in the air, condensing into raindrops, is swept up by ascending hot currents of air into heights so cold that the raindrops are converted into hard pieces of ice. These, descending, have their surfaces thawed in the lower and warmer strata of the air, but are then caught and whirled up afresh, to freeze again, and perhaps to combine with their nearest fellows to form formidable hailstones.

Scientists who have examined these hailstones state that they are usually composed of layers of ice, crystallised around a nucleus, and that some of the biggest, when broken open, have a hollow within, into which well-formed ice crystals radiate.

In temperate Britain we naturally expect to escape more lightly than the hot countries, but even here hail is at times intensely destructive. One hailstorm of modern times smashed thousands of panes of greenhouse glass in the Home Counties. Another, earlier in the century, swooping over the August fields of the counties of Huntingdon, Bedford, and Cambridge, scourged the crops with chunks of ice five inches in diameter, battering beans from their pods and cutting the stems to the ground. In one wood a multitude of starlings, sheltering in trees, were all killed.

#### Darwin Sees the Havoc

But these icy barrages from the air kill more than starlings. Darwin, when in South America, saw one morning some of the results of a hailstorm that had swept the district the night before. The violence of the descent had killed nearly all the wild life. He saw the skins of 20 deer that hailstones had slain in the vicinity, together with rheas, ducks, hawks, and partridges. Darwin's party dined that day, he tells us, exclusively on "hail-stricken meat."

Hail is a chief terror to vineyard-owners, by whom, in France, Austria, and America, much money and effort have been spent on special artillery for firing at the clouds in which the hailstones are believed to originate. But hailstorms arise suddenly, while human preparations for their dispersal are necessarily slow, and so far, it seems, it is not the hail but the vines that are vanquished during such encounters between man and the flying ice-barrage.

## WORLD NEWS REEL

**HELP FOR THE JAPS.** British Forces helped the 72,000 Japanese rendered homeless in the island of Shikoku by the recent earthquake; 60,000 sets of clothing and blankets were made available in this area.

The first country in Europe to abolish the rationing of boots and shoes is Czechoslovakia.

**Berel Litwin, aged 105, of Montreal, not long ago attended his daughter's golden wedding. Three of his great-great-grandchildren were at the celebration.**

**HOLLAND'S HOUSES.** A yearly increase of 70,000 houses will be necessary to overcome the housing shortage in Holland, it has been announced by the Dutch Minister of Reconstruction. It will take eleven years to build the necessary houses.

A two-inch nail which had been in the lung of a 16-year-old Australian girl for 14 years was removed recently at the Jackson Bronchoscope Clinic in Philadelphia. Public subscription had enabled her to be flown there from Australia, and Dr C. L. Jackson made no charge for the operation, which saved the girl's life.

The Turkish Government has placed contracts for £7,000,000 worth of electric and railway equipment with Metropolitan Vickers and other firms.

**FOREIGNERS IN FRANCE.** The French census reveals that, last year, of the 40,517,923 people living in France, 1,670,729 were foreigners.

Prohibition is to be established in Bombay in four years' time. Between next April and then, drink shops will be closed for progressively longer periods every year in order to give drinkers a chance to change their habits.

The United States Army Air Force and the R.A.F. are to exchange officers to take courses and be attached to commands and the staff, so that officers of each Force may gain experience of the methods of the other.

**MORE RUSSIANS.** The Russian Minister of Health has said that the birthrate in Russia is double that of the war years.

So far, £12,000,000 worth of stolen Dutch property has been traced in Germany.

For the first time in Ceylon a Sinhalese has been appointed head of the police force there.

An agreement has been signed by Argentine and Uruguay to build a dam on the River Uruguay. The dam, to be the largest in Latin America, will cost £62,500,000.

For the first time in history a whaling expedition has gone to the Antarctic from the Soviet.

## HOME NEWS REEL

**CHINA IN LONDON.** Chinese opera in the Chinese language will be produced for the first time in Britain on January 20, at the Westminster Theatre, London.

The two white kangaroos presented to Mr Churchill by Australian stockowners made their first appearance at the London Zoo recently.

The G.P.O. has approved new and larger lamp-post, letter boxes to replace those now in use. Not only will they hold more mail but will have a bigger posting aperture.

Last year 2,800,000 Servicemen and women returned to civilian life.

East Anglian farmers have received more than £3,000,000 for last season's sugar-beet deliveries.

**SEA RESCUES.** During 1946 lifeboats were called out more than 620 times and they saved nearly 600 lives. It was the busiest year the Lifeboat Service has ever had in times of peace.

Essex Education Committee expects to spend £8,000,000 this year. Among its plans are schools with lawns, flower beds, cinemas, and music rooms.

Cable and Wireless Ltd has now passed into public ownership. Its new chairman is Colonel Sir Stanley Angwin, Engineer-in-Chief of the G.P.O.

## YOUTH NEWS REEL

**FRENCH SPOKEN HERE.** At the International Guiders' Training Week, held at Foxlease in the New Forest last week, the speaking of English was completely banned, French being the language used. Besides British Guiders there were representatives from France, Belgium, and Switzerland.

During a recent tour 16 Scouts of the 8th Dover Troop visited a local coal mine. After descending the pit-shaft they walked 1½ miles to the coal face.

Fifteen-year-old David Dimmock has adapted a Scout story as a radio serial which is to

be broadcast in a special programme. The voice of International Scouting, on Sundays from Luxembourg Radio.

**MEMORIAL CHAPEL.** To commemorate the sacrifice of officers and Old Boys who gave their lives in the war, a Boys Brigade battalion is adding a memorial chapel to its headquarters. In addition to its use for worship the chapel will be used on the occasion of the admission of new officers.

On January 25 Lord Rowallan, Chief Scout of the British Commonwealth and Empire, leaves for a tour of West Africa.

## KING'S PICTURES

OVER 200,000 people, including many parties of schoolboys and girls and students, have visited the exhibition of the King's pictures which is on view at the Royal Academy until March 16. Some schoolchildren came from places as far away as Newcastle-on-Tyne, Grimsby, Manchester, Bolton, Leicester.

Principals of schools wishing to take parties of their pupils to see the pictures can obtain tickets at half price (9d) in batches of ten or more. Applications should be sent to the Secretary, Royal Academy, Piccadilly, London. Tickets at the reduced price of one shilling can also be obtained for their members by girls' and working-men's clubs, staff associations, and certain other organisations.



## Heather For Housing

THE purple heather and bracken which form so indispensable a part of Highland scenery have never been very popular with Scottish farmers. Their creeping menace is difficult to check and both have rendered useless many hundreds of acres of good farming land.

Two new developments, however, point to the possibility of these pests becoming a blessing.

Mr F. F. Nichol, of Furnace, has succeeded in making boards from dried bracken which, he claims, can be used for wall lining.

A Dutch firm has also been experimenting with Scottish

heather and finds that it is suitable for converting into synthetic flooring. Tests have proved so successful that it is hoped soon to establish a factory in the West of Scotland to produce this material so urgently required for housing.

There is an old saying that if you keep a thing long enough you will find a use for it. Scotland has kept its heather a long time, during which it has pleased mainly poets and tourists. If now the magic hand of science contrives to create a new industry from its purple bloom it will please hard-headed Scots as well.

## A SHOCK FOR THE FISHERMAN

WHEN some Scottish East Coast fishermen drew in their seine-net the other day a great, black flat-fish was found among the catch. It weighed two stones, was round in shape, and had a long, narrow tail.

The fishermen were mystified, for they had seen nothing like it before. One incautiously touched it and drew his hand back hurriedly for he received a sharp electric shock. The fish was an electric skate, which is rarely found to the east of these islands. Later it was sold for a shilling.

## You Lucky People

"You have had greater opportunities than any other generation has had, and you have been trained better than any other generation to take advantage of those opportunities."

Professor Sir Charles Webster said this to 3000 schoolchildren at the recent conference in London on Education in World Citizenship.

At the same conference Professor P. B. Moon, secretary of the Atom Scientists' Association, declared that in his view the invention of the atom bomb was less important than that of the steam engine. Things were now moving faster, he said, and the change of speed was the really important factor.

Undoubtedly the steam engine, which introduced mechanical transport, made a tremendous impression on the people when it was invented. Since then the internal combustion engine has given us greater speed; atomic energy will take us farther.

## Explaining the Animals

REGULAR lecture tours, mainly for children, have now been started again at London's wonderful zoo of stuffed animals, the Natural History Museum (recently described in the C.N.). The tours are led every afternoon at 2.30 except Sundays by one of two very well-informed guide-lecturers, Miss Edwards or Mr Leutcher.

These fascinating tours of Whale Bay, the Fish Gallery, the Reptiles, and so on, are proving popular, and grown-ups, too, like to join in, for the guide-lecturers' descriptions of the creatures' lives and surroundings are the next best thing to seeing them in their natural haunts. Boys and girls, provided they are members of an organised party, are allowed to handle the exhibits and, of course, ask any questions they like.

Teachers wishing to take parties to the lectures should write to: The Guide-Lecturer, British Museum (Natural History), Cromwell Road, S.W. 7, saying when they want to come, how many they propose to bring, what their pupils would like to see, or what lessons the teachers would like illustrated.

## ROSES BY AIR

ROSE cuttings sent from England by air have arrived in New Zealand only seven days after they were taken from new varieties of rose bushes in England. They will be a valued addition to the excellent rose garden at Massey Agricultural College, where there are 6000 rose plants and over 400 varieties.

## Strange Visitors



Clad in thick furs, a Laplander is here seen with one of the pair of reindeer presented to the London Zoo by a Norwegian General.

## THE POWER OF CONVERSION

GENERAL ALBERT ORSBORN, the Salvation Army's international leader, speaking in London of his recent tour of the Americas, said that in Detroit he was invited to dinner by the Bowery Corps, which is composed of reclaimed drunkards.

One of the SA officers of this corps at the dinner was sitting next to a judge who, in the days before the officer was converted, had threatened to send him to an asylum for incurable drunkards.

The members of the Bowery Corps give ten per cent of their earnings to the Salvation Army, and their gifts form a higher average than those of any other branch.

General Orsborn also told of his meeting Major Pean, one of his South American officers who, he says, was mainly responsible for the abolition of the notorious Devil's Island Penal Colony, where the innocent Captain Dreyfus, and thousands of other French prisoners endured banishment and misery.

## An Atlas With a History

WHO does not know the famous poem which tells of the burial of Sir John Moore at Corunna, and which begins:

*Not a drum was heard, not a funeral note  
As his corse to the rampart we hurried.*

The other day a London collector, Mr J. Waley Cohen, discovered in Storey's bookshop the atlas used by the General during the campaigns in Spain. The collection of nearly a hundred maps bears Sir John's signature, and has an index in his writing.

After the battle Sir John's brother handed the atlas to the dead General's aide-de-camp, who in due course wrote in it:

"This book was the companion of the brave and unfortunate Lt-General Sir John Moore, K.B., whose signature it bears, in his last campaigns in Spain. He was

particularly anxious, even in his last moments, that it should be returned, in consequence of which it was sent to me on 16th June, 1809, by his brother, Francis Moore, Esq.

"I hope those who may succeed me will preserve this book as a memorial to a most amiable man in private life, as well as a great military character, who nobly fell in the field of battle at Corunna on 16th January, 1809, in the very moment of a decisive victory over the French, obtained by his own skill and valour, and seconded by the exemplary conduct of the brave army which he had the honour to command."

Now, 138 years after his death, Sir John's atlas has come to light. Let us hope that it is not again allowed to disappear, but will remain as a memorial to an "amiable man and a great military character."

## DODOHO KNOWS

### WHAT HE WANTS

WHEN Dodo, a famous South African chimp, was placed in the Johannesburg Zoo recently for a short stay, he objected so strongly to being placed in a common cage that he went on strike. He became vicious, and sulked until he was provided with a special flat the following day, complete with bed. He seems to be contented now that his idea of comfort has been provided.

## King's Jewels and Labourers' Pence

AMONG some very interesting documents recently acquired by the British Museum is the original inventory of King Henry VIII's plate, jewellery, and ordnance. The Museum's trustees were able to purchase this and other precious documents because of a generous contribution made by the Goldsmiths' Company.

Another valuable document acquired by the Museum is a vellum roll on which is a list, made by the Keeper of the Great Wardrobe of Edward III in 1333 and 1334, of payments for heralds, minstrels, and tournaments, as well as wages paid during the siege of Berwick. This document was presented to the Museum by an anonymous donor through the Friends of the National Libraries.

## Boy Builders

WORKING since last February on the Mildenhall Road Estate at Bury St Edmunds, eight boys, whose average age is 14 years eight months, have built what Ministry of Works experts declare are as perfect as a pair of houses could be at this time.

They are three-bedroom houses of semi-detached type and were built under a scheme planned by the Building Apprenticeship and Training Council. Boys trained under this scheme can be loaned to contractors, who pay them a quarter of a craftsman's rate at 15 to one-half rate at 18.

Throughout the country there are 88 projects similar to this operation, involving 2500 boys, and it is hoped that by the end of 1947 they will have built a thousand houses.

## THE POISONOUS HEMLOCK

HEMLOCK, a plant that was the source of the poison by which the ancient Greeks put Socrates to death, has become a nuisance in some parts of New Zealand.

County councils have ordered every occupier of land where hemlock is growing to do everything possible to destroy this weed.

In the warm climate of New Zealand all kinds of weeds grow much faster than in their colder native lands in Europe.



Youth welcomes a frost, whatever their elders may say about the weather





### Czech Youth Club Choir

These Czech girls in their colourful national costume are members of a choir of 69 boys and girls who are touring Britain. They will broadcast in the Children's Hour on Saturday.

## A WINTER NIGHT'S ADVENTURE

Nor long ago four young people set out from the Youth Hostel at Glencoe, Argyllshire, on a winter day's adventure which nearly ended in tragedy. They intended to climb Bidean nan Bian, the highest mountain of these enclosing this wild Highland glen.

They reached the peak, 3766 feet up, and were returning to the hostel when one of them, a girl veterinary student aged 20, who was wearing ordinary shoes instead of mountaineer's studded boots, slipped and rolled 250 feet down a steep, snow-clad slope. She landed on a ledge where her leg was broken and her knee badly cut.

The little party were now in a dangerous position. The other three could not carry the injured girl without help, but help was far away, for Glencoe is still a desolate region. One of them stayed by her and built a wall of stones and rocks to protect her from the bitter wind while the others went for assistance.

Darkness fell before a rescue party of Scottish mountaineers, shepherds, and police, some of whom came from Fort William, 30 miles away, could assemble. To make matters worse a snow-storm swept the mountain's icy slopes. But the brave rescuers fought their way up, carrying a stretcher, and guided by the feeble light from their electric

torches and hurricane lamps. The most difficult part of their work began when they reached the ledge where the injured girl had lain for ten hours. They had to carry her on a stretcher down the icy slopes of Bidean nan Bian. Only experienced mountaineers could have attempted it. They had to lower the stretcher with ropes or slide it over the ice on runners, and all the time they faced the danger of slipping themselves. But the sturdy Scots successfully brought their patient to the foot of the mountain and despatched her to hospital at Fort William.

To explore the heights of Glencoe in winter one needs the right mountaineering equipment. It is a region of wild beauty, though Dickens described it, many years ago, as "... such haunts as you might imagine wandering in in the very height and madness of a fever," and even Macaulay called it "the valley of the shadow of death." Macaulay, however, probably had in mind the treacherous massacre here of the MacDonalds by soldiers mostly of the Campbell clan in 1692.

Two thousand acres of Glencoe were taken over by the National Trust for Scotland in 1935 after a motor road had been constructed through the vale, and tea-houses and petrol stations threatened to mar its lovely grandeur.

## An Elizabethan Handwriting Test

THE CN handwriting competition is a reminder that in former days skill in penmanship was earnestly cultivated and the scholar prided himself almost as much on the beauty of his handwriting as on the width of his knowledge.

In Queen Elizabeth's time public contests were held between leading exponents of the art, in much the same spirit as champion tennis players or golfers meet in competition today. Such was the public interest that these contests attracted large crowds of spectators.

On one famous occasion two rivals in penmanship in Eliza-

beth's time, Peter Bales and Daniel Johnson, challenged each other to a public exhibition of their skill. Eventually Bales was declared the winner and awarded the prize of a handsome gold pen. Johnson, however, objected to the decision of the judges and was pacified only when he was presented with a similar award.

One of the achievements of Bales, who was a very cunning craftsman, was the writing, in a minute hand, of a long excerpt from the Bible, which was set in a ring and presented to Elizabeth together with a magnifying-glass to enable the Queen to read it.

## Miners Down in Cornwall

MUCH has been heard lately for and against the employment of Polish miners in Britain's coal mines. But fifty Polish miners have already been engaged to work at Geevor Tin Mine, St Just—one of the three Cornish mines in active production at the outbreak of war. They are not the first foreigners to toil in Cornwall's mines.

There was a period, back in the 15th and 16th centuries, when Germans found their way there, much to the resentment of the natives. In 1586, a skilled German metallurgist, Ulricke Froese, was given charge of mining operations at Perranporth on the North Cornish coast, but the association was not happy. Feelings ran so high, especially when a competition was suggested between Cornishmen and Germans to decide their respective merits, that Ulricke appealed to his company to transfer him to their works at Swansea "as being more suited to his quietness."

Little organised foreign labour, however, has been employed in Cornish mines through the centuries. Cornishmen, on the other hand, have not only unearthed the riches of their own county but have gone to the ends of the earth to do the same. Their mining instinct has led them to every country of the New World and the Old in quest of diamonds, gold, silver, copper, tin, and other mineral wealth, often being first in the field. Exactly 100 years ago, for instance, gold was discovered in Australia, and the miners were Cornishmen.

Often has it been said that whenever a hole is sunk on the face of the earth you will find a Cornishman at the bottom of it, searching for metal.

### Veteran Ringer



At Worsley, near Manchester, Mr Derbyshire, who rang his first peal on church bells in 1897 to celebrate Queen Victoria's Diamond Jubilee, rehearses on the handbells.

## THE SALVATION ARMY IN 1946

THE forty-second issue of the Salvation Army's Year Book reveals that last year this great Christian Force ran 123 children's homes, caring for 5012 children. Also during 1946 the SA found accommodation for 41,941 people in its shelters and hostels, supplied 34 million meals, and found jobs for over 68,000 people.

Many other facts and figures of a year's good work are in this three-shilling book.

## The Editor's Table

### PATIENCE IS WINNING

SPEAKING to the British people about the task of peacemaking, Mr Bevin, the Foreign Secretary, has remarked that patience is winning in the biggest task which has ever faced the human race. "Do not be impatient," he pleaded. "This time we may be building slowly, striving for perfection." For remember, the peacemakers are building not only for this generation but for generations yet to come."

Britain's long experience in dealing with all kinds of people is an asset in peacemaking. She knows that quick results are rarely achieved in negotiations which affect the lives of millions of men and women; and it is upon people that Mr Bevin keeps his eye, and not on frontiers and possessions. Behind the patient arguments of the world's statesmen in New York, and soon in Moscow, are the hopes of the common people.

"My policy," said Mr Bevin, "is to work to create conditions in which the different races can co-operate and which will reflect themselves in the happiness and freedom of the people. In every discussion I keep the thought—can I turn this to the economic benefit and prosperity of the common people?" That means patience in waiting for an opportunity, and patience in debate, and patience again in accepting rebuffs in good humour.

Nothing less than this sort of patience can save the world from worse disasters than the ones just experienced; and in all this work of patience Britain's voice and action are clearly heard. In the Netherlands East Indies two Englishmen—Lord Inverchapel and Lord Killearn—led the way in promoting agreement between the Dutch and the Indonesians. By their action they calmed hot tempers, and effectively laid down a plan which all agreed upon and which opens up a new era of co-operation in that region.

PATIENT work of this kind is born of experience and friendliness. Britain has declared that she seeks no further power and prestige for herself. She offers her services to the world's peoples wherever they can best be used to further the cause of a just and durable peace.

"We are building for the generations to come," said Mr Bevin. That is the wide perspective of the patient man's vision. We may not, in our lifetime, see all the hopes and dreams of these years of peacemaking come true. But we shall be remembered among those who were at the start of a new world and had the patience to look ahead and believe in it.

## School Lessons

A SCHOOL problem which is very acute just now was discussed the other day by Miss E. M. Begbie, when making her presidential address at the conference of the National Union of Women Teachers.

It is the problem of lesson time lost because of the increased social services now given through the schools. Schoolwork, she said, is bound to suffer when school meals are served in two or three shifts; when school halls or classrooms are taken over for meals an hour before the session is ended; when children have to eat their dinners on slanting desks; when teachers have to spend hours measuring their pupils for supplementary

### NEW BRITONS

THE Government has decided that about 1,400 orphans, most of them Germans or Austrians who came to Britain as refugees before the war, may, if they so desire, become naturalised as British subjects before the age of 21—the legal age for naturalisation.

The Home Secretary, Mr Chuter Ede, has asked the refugee children's organisations, which are in touch with all these young folk, to let the orphans be fully aware of this opportunity of becoming British citizens.

These young people have had a tragic childhood. In most cases their parents were put into concentration camps by the Nazis, and they were sent to Britain by relatives or friends. Since then they have been living in hostels here or with British families.

We shall heartily welcome these new fellow-citizens of ours and hope they will soon be able to forget their sad childhood days.

### JUST AN IDEA

As Emerson wrote, Life is not so short but that there is always time for courtesy.

## Under the E

PETER PUCK WANTS TO KNOW



If sheep have pen friends

WE may be able to use the wind to make electricity. A current of air.

FRENCHMEN are often bare-headed, says an air hostess. Better than being bare-faced.

WE have to use our brains to economise in timber, says a builder. They are not a good substitute.

RECIPES often tell you to add sugar to taste. What else would you add it for?



## School Meals?

clothing coupons; and when teachers start the afternoon classes tired because they have had no adequate midday break.

These social services are, of course, vital to the bodily welfare of our future citizens, but it is a sad irony if they can only be given at the expense of the pupils' mental development.

Miss Begbie herself pointed to the remedy: more school buildings and equipment, and more paid staff as soon as possible.

There can be no two opinions about it, for all political parties are agreed that the new Education Act—the Children's Charter—must be used to speed up learning if our nation's future is to be assured.

## Educational Films

THE year 1947 is likely to be notable for a big development in educational films.

Two committees have been appointed—one by the Government, and the other by an association of local education authorities and teachers—to conduct this great film drive.

One committee will arrange for and supervise production. The other will draw up programmes of production, select suitable subjects for filming, and recommend educational advisers on the production of the films. This should ensure plenty of educational films of the right kind, directed by experts.

The C.N. has long stressed the importance of this form of education. Now, it seems, we are well on the way to having educational films that will really educate, as well as amuse.

## IN THE WOODS

HERE are old trees, tall oaks, and gnarled pines, That stream with grey-green mosses; here the ground Was never trenched by spade, and flowers spring up Unsown, and die ungathered.

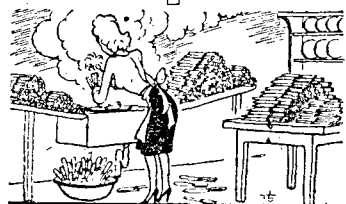
William Cullen Bryant

## Editor's Table

A MAN has bought a farm to see if farming is a bottomless pit. He means to get down to it.

IF a thing looks right it is right, declares an architect. But when crossing the road we should look left as well.

A MAN has had a potato called after him. Better than having it thrown after him.



THE average woman washes over 12,000 knives a year. She is lucky to have so many!

## THINGS SAID

THE roots of self-respect lie in the work done to the best of a man's abilities, and this achievement lies within the powers of all.

Sir Richard Livingstone

LET us endeavour to capture the spirit of cheerfulness and good fellowship which in 1940 so impressed the world.

Sir John Anderson

BRITAIN's strength is the perseverance of its people. They grumble but they do not quit.

New York Herald Tribune

BOOK centres should be started in schools without libraries.

D. R. Hardman of the Ministry of Education

DON'T wait for someone else. That's not the British way. We're not sheep.

General Sir William Slim

## Winter Fireside

THE flames by fits curled round the bars,

Or up the chimney crinkled, While embers dropped like falling stars,

And in the ashes tinkled.

James Russell Lowell

## Who is to Own Antarctica?

IT is encouraging to see signs that there is not to be a greedy, quarrelsome scramble among the powerful nations for territory in the vast continent of Antarctica, and the great mineral wealth which probably lies hidden under its eternal snow and ice.

Not long ago Mr Dean Acheson, American Acting-Secretary of State, announced that his country had never formally asserted any claims in that area on her own behalf, and he said that the U.S. Government did not recognise any territorial claims by any nation in Antarctica and reserved the right to contest such claims in the future.

Another nation interested in Antarctica, New Zealand, has denied through her Prime Minister, Mr Fraser, that she has any desire to send an expedition to the Antarctic to get ahead of the one led by Admiral Byrd—described not long ago in the C.N. The Americans, said Mr Fraser, were as welcome to fly over New Zealand territory in peacetime as they were in war.

It is natural that several nations should be anxious to secure a share of this unknown continent—with its unknown riches—but we shall hope that the United Nations will settle all claims justly and in the spirit of international co-operation.

## KEEP THY WORD

PAY that which thou hast vowed. Better is it that thou shouldst not vow, than that thou shouldst vow and not pay.

Ecclesiastes

## Exploring the Milky Way

A NEW wonder of astronomy was described at a recent meeting in Boston of the American Association for the Advancement of Science. It is a new device for astronomers and is a highly-sensitive photo-electric cell by which stars whose light was previously extremely faint, even when photographed on an infra-red plate, can now be studied.

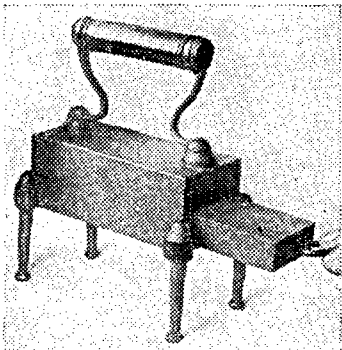
This new sulfide photo-conductive cell turns the light from these faint stars to electrical impulses which can be magnified many times and accurately measured. It will permit the examination of stars only one fifteenth as bright as the faintest star ever observed. It may enable astronomers to study details of the Milky Way which up to now have been hidden from them.

This new photo-electric cell was developed at the North Western University, Chicago, during the war.

## Round the Museums

### AN OLD BED-WARMER

THIS queer-looking contraption is not an old-fashioned flat-iron on a stand, although visitors to Dover Museum might be



excused for thinking so. It is a bed-warmer used in the middle of the 19th century by travellers who were doubtful about the dryness of their beds. The block of iron was heated in the fire, placed in a slot in the base of the bed warmer, and the whole lifted by the handle and placed between the sheets.

## TULIPS FOR CANBERRA

LAST year Mr Chifley, Prime Minister of Australia, when visiting London, went for a walk in St James's Park and gazed rather wistfully at the tulips. He thought of the wonderful display of tulips there had been at Canberra, the Australian capital, before the war. They had been mostly a gift from the Netherlands Government and had blossomed every season for 20 years.

But when the war came every available Australian went on war service or work, and as there was no one left to tend the Canberra tulips they all perished.

Hearing, last year, of these beautiful war victims, our superintendent of the Royal Parks, Mr Duncan Campbell, obtained the approval of the British Government for sending 6000 tulip bulbs to Mr Chifley, in Australia. The bulbs are all British-grown and they will be duly planted in the gardens at Canberra.

Long may they bloom as a floral link between Australia and the Motherland.

## SHIPS ON THE MUD

By a Sailor Home From Sea

ALONG the grey Essex coast lie the empty hulks of a hundred warships. Rust has stained their iron bulwarks and the sea wind howls mournfully through their slack rigging and their masts, which point long bony fingers across the slaty North Sea sky. In the vivid words of naval men, these ships are "on the mud."

Frigates, destroyers, mine-sweepers, and corvettes, they once ploughed across distant oceans with their guns chattering defiance at the enemy as they herded wallowing merchantmen through perilous waters.

Some of these dead ships were built in desperate haste to meet the U-boat wolf packs whose explosive fangs were tearing holes in our Atlantic convoys. Manned by raw crews they sailed from the shipyards and hurled themselves into the terrible battle. Some saw service in the First World War and sailed out again twenty years later, sweeping mines and escorting slow merchant ships. Many distant horizons saw their bulky, old-fashioned silhouettes as they went about their unsung task of clearing the seven seas.

But now those hectic days are over, and peace sees them lying derelict on the grey mud of the Essex coast; and when the winters of another decade have rusted their upperworks they will settle deeper into the silt of the estuary until only bare iron ribs mark a graveyard of gallant veterans.

They make a sad sight for the sailor. Leaning over the rail of his own vessel as it forges slowly out of the estuary and heads for the open sea past groaning buoys, he knows that these derelict ships are truly dead. For a ship lives only through the crews who man her, and they have gone their way.

## The Deserted Decks

No longer do voices call through the deserted messdecks, nor helmsmen swing the wheel under the shadowy light of the binnacle through the night watches. No longer do the engines pound massively under throbbing decks, and the grimy stokers who clawed their way across the tilting plates have long since gone to other ships and other seas.

A ship is a personal thing to a sailor. And it is painful for him to see one lying empty on the mud of some desolate estuary. He stares at her and thinks of all the sailors who have made her messdecks noisy with laughter, of all the stories which have been written into her rusty bulwarks, of all the seas which have slapped and buffeted her through perilous years of storm. Perhaps she rolled to a beam sea so that her masts slid over to an angle of forty-five degrees and every movable object above and below decks clattered crazily across the plates; or at two knots below maximum speed shook like a terrier in the water so that writing letters became impossible to the long-suffering sailors off-watch in the messdecks.

## Friendship Born at Sea

Few landmen can understand this sadness of a sailor contemplating a derelict vessel. They cannot know the intimate friendship between the sailor and his ship, born of long weeks at sea when he sights no land, only the curving rim of the far horizon and the changing pattern of the green waves. The tiny spaces of the ship become his world and her sturdy plates hold him safely above many dark cold fathoms.

Yes, it is a sad thing to see a good ship lying derelict on the mud. She has steamed in from her last struggle with the roaring ocean. Her crew has been paid off, her guns loaded on to clumsy railway trucks and her decks stripped of machinery. For the last time her screws churn the sandy water into foam as she steers across the wide estuary and buries her bows in the oozing mud. Her engines stop. The skeleton crew leave her and, as the tide drops, the empty ship leans wearily over in the grey mud, a gull perched on her gaunt mast like a lonely sentinel.



## THIS ENGLAND

A sturdy team of horses and a wagon-load of logs mounting Lamberhurst Hill, Kent



## The Father of Australia

AUSTRALIA never forgets her "father." Such is her title for Sir Joseph Banks. It is more than a century and a quarter since he died, and Australian writers have paid him tribute; but now a full account is to be issued of the man to whom we owe it that Australia is British. A fund has been subscribed and is to be used for the work by the trustees of the Mitchell Library at Sydney, New South Wales, which possesses important letters and documents concerning Joseph Banks.

Born to wealth and a passion for natural history, Banks, after a University career, was only 25 when, at his own cost, and bearing the expenses of another botanist, artists, and servants, he sailed with Captain Cook. This famous three-year cruise round the world in the little 370-ton coal ship, *Endeavour*, resulted in the claiming of New Zealand for Britain, and the hoisting of the British flag over that part of Australia which they called New South Wales. They lost 30 men during the voyage, not from scurvy, but mainly from malaria at Batavia.

Although he neglected the advice of his friend, the famous Thomas Pennant, who earnestly advised him to take an umbrella on the voyage, Banks survived all his ordeals, facing grave dangers, and was always among the first to enter boats that were to explore perilous unknown waters. Australia was reached in 1770, and then the *Endeavour* came home, leaving the great continent to its natives, its kangaroos, and koala bears.

During the next few years we lost the Colony that is now the United States, and it became necessary to find a new outlet, not only for convicts, but for settlers, among whom were

many, known as loyalists, who had retired from an America that had ceased to acknowledge the British flag as its own. Sir Joseph Banks gave evidence before a Parliamentary Committee appointed to deal with the subject, and enthusiastically proposed New South Wales, pointing to its many natural claims, its admirable climate, its thinly-peopled lands, the absence of savage beasts, and the advantages that it must possess in the future in respect of mercantile activity and marine enterprise.

Banks was by this time famous as a scientist, a world figure, and his influence was decisive. In 1788 the first little fleet sailed with its colonists for their new home in Australia. That is why Australia calls him her father, and is now engaged on volumes that will extend his fame.

The fleet arrived only just in time. They had cast anchor and hoisted the flag only a matter of hours when a French expedition, under the gallant La Pérouse, arrived. In the absence of the British, who had not yet legally made good their claim to the land, he might have declared a great part of the continent annexed to France. Australia does well to remember her father.

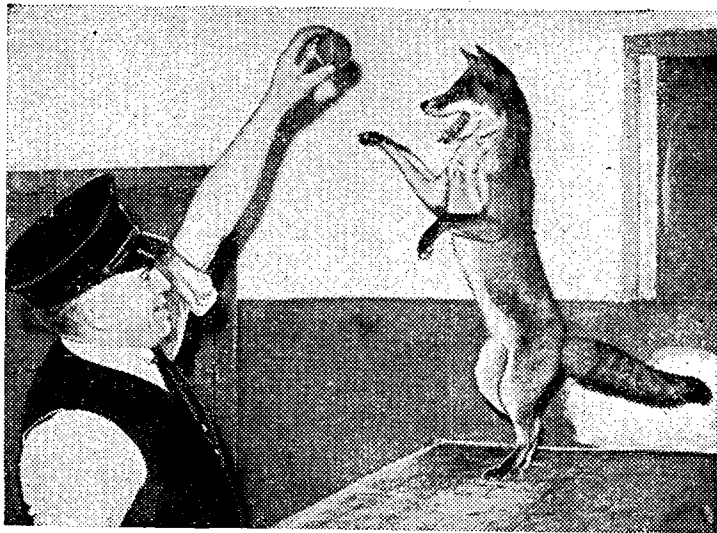
## BETTER FARE FOR SEAFARERS

THE post of ship's cook may not sound so romantic as that of engineer or captain on the bridge, but it is a very important job; and greater attention is to be given to their training.

The Merchant Navy Training Board propose that a boy, on leaving school, should have four months' general training on shore, and then at least a year's sea service. After this, youths who are serving on passenger liners will continue to be trained

for the higher catering posts by the shipping companies, while those who serve in cargo ships will attend two more shore courses, at the end of which successful candidates will be given first-class catering certificates which will qualify them to act as chief cooks and chief stewards.

Clearly the Merchant Navy Training Board realise that good cooking is as essential to a sailor as to an ordinary civilian.



### Playtime at the Zoo

Margery, a young vixen, is remarkably tame and enjoys a friendly game with her keeper at the London Zoo.

## AMPLIFIER OF THE WHOOPING CRANE

WHAT is the rarest bird in the world? Answering this question in the BBC Children's Hour early last month, Mr Peter Scott chose the Whooping Crane as the rarest but one. Only 17 Whooping Cranes are known to be left, and unless the efforts of Canada and the United States to keep them alive succeed they will soon be extinct as the Dodo.

These cranes breed in the marshes of the Arctic Circle, in Northern Alberta and Saskatchewan, and the Canadian Mounted Police, the Hudson's Bay Company, and Dr O. S. Pettingill, of the American Museum of Natural History, in his aeroplane, are keeping watch and ward over them to see that no more of them disappear. They usually disappear when someone without sense, but with a gun, sights one of them. It is not easy to get a sight of them as they stand in their marshy feeding ground, for the appearance of a human being a quarter of a mile away sets them at once on the wing. One or two skips, and then they spread their great white sails and are off, with slow strong beats of the wing which carry them away at a great pace.

Their plumage is snow-white

except for black wing-tips and a dull red featherless head. As they fly they gather up their long legs in a line with their body, and stretch out a long neck that is pointed with a stiletto-like beak. The streamlined effect is complete, and the long neck holds their whooping horn. Within it is coiled 60 inches of a windpipe which by its coils so amplifies the note that on a windless day it can be heard three miles away. These and other details of this beautiful great bird appear in the latest publication of the American Museum of Natural History.

## CLAMMY

### Little Necks and Gapers

AT Girvan, in Ayrshire, fishermen have been earning as much as £40 each day in selling clams they have taken from a recently-discovered bed of the shellfish. So rich has been the harvest that £10 a day is considered a modest return.

Clams are popular as food, chiefly in America, where the soft clam or long clam abounds on the East coast of the U.S. The small clams—young ones—are considered especially toothsome and are called Little Necks. The soft clams sink themselves into the sand near the shore with only their siphon mouths showing. If disturbed they eject a spurt of water before sinking to—what they imagine to be—safer depths. Clam-gatherers dig them out at low tide. Their shells were formerly used by the Indians as money.

In the East Indies is a giant clam which is the biggest living shellfish in the world. The soft part of one of these monsters often amounts to 20 pounds of edible flesh, while its deeply hollowed shell, with a beautifully white inner surface, may weigh 500 pounds. These huge shells are sometimes used in churches in France as holy water containers—bénitiers. At St Sulpice Church in Paris there are two so used which weigh over 500 lbs apiece. Natives of the countries where the giant clams are found often use their shells for baths.

Such mammoth shellfish would help to ease our food situation today, but we must be content with our soft, or gaper, clam.

## Cream and Milk Chocolate Must Wait

FOR some years children have enjoyed a good milk ration, but most grown-up people have not. According to Mr J. L. Davies, an officer of the Milk Marketing Board, it is hoped by next winter to allow every non-priority consumer three pints of milk a week. This will mean increasing present milk supplies by about ten per cent. Last month 98,000,000 gallons of milk were produced, compared with 78,000,000 gallons in December

1941. What a magnificent achievement on the part of our farmers, in face of a shortage of animal foodstuffs for the winter.

Mr Davies has stated that only when consumers' ordinary needs have been fully met can milk be used for fresh cream, real ice-cream, milk chocolate, and other dairy products. All will agree that a sufficient supply of milk must be available for everybody before it is used for making such luxuries.

## RIP VAN WINKLE—Washington Irving's Famous Story, Told in Pictures



Rip gazed fearfully at the strange figure in old-fashioned dress that approached him on the mountainside. The stranger signed to him to help carry the keg. Always helpful, though very frightened now, Rip did so and was led toward a cleft in the rocks from which came the sound of thunder.



They passed through the cleft and Rip gasped at what he saw. In an open space a company of odd-looking personages, dressed like his guide, were playing ninepins. The rolling balls made a noise like peals of thunder. The players were silent and very serious. Suddenly they stopped their game, and, still without speaking, stared solemnly at Rip. He felt his heart turn within him.



Rip's guide emptied the keg into flagons and signalled to Rip to hand them to the company. Trembling, he obeyed. When they had resumed their game Rip felt less afraid of them and ventured to taste what they were drinking. After swallowing two flagons of it he fell into a deep sleep.



When he awoke it was morning. "Have I slept here all night?" he pondered. "Oh, that wicked flagon! What shall I say to Dame Van Winkle?" He called his dog Wolf, but the only answer was the cawing of idle crows.

Next week's instalment tells of the surprise awaiting Rip Van Winkle when he returned to his village



The Children's Newspaper, January 18, 1947

# WHEN QUEEN BESS HAD TOOTHACHE

IN these days of school dental clinics and periodical visits to the dentist, our teeth and their troubles are well cared for. But it was not always so.

It was, in fact, a Frenchman named Ruspini, dentist to the Prince of Wales, afterwards George the Fourth, who first advocated the treatment of children's teeth, insisting that the neglect of this side of dental practice in England was the cause of widespread loss of teeth in grown-ups. But it was nearly a hundred years before any real steps were taken to remedy this matter.

Ruspini was something of a mountebank, yet had many redeeming qualities. He was a great lover of children and spent a great part of his fortune in founding an orphanage for girls under the auspices of the Freemasons.

From the frequent references to tooth-drawers in Tudor and Stuart times, there is no doubt that diseases of the teeth and gums were then very common. Queen Elizabeth was a healthy woman, but suffered from toothache from childhood, and in a life of Bishop Aylmer it is recorded how on one occasion when the Queen was suffering acutely and causing her attendants no small tribulation, it was suggested that she sent for the surgeon and had the tooth drawn. The old Bishop, who was present, volunteered to have one of his own extracted to show that the operation was not such a dreadful affair. Hentzner, a German visitor to Elizabeth's Court, described the Queen as

having black teeth, and mentions this as characteristic of the English, owing to their fondness for sweetmeats and sugar.

We can glean some knowledge of the tooth-drawers in the great Queen's reign from a work by Henry Chettle, a friend of Shakespeare and a prolific dramatist of the period, though only the titles of his plays, with one exception, have come down to us. In his pamphlet, *Kind-Hart's Dreame*, published in 1593, Chettle speaks of the "tooth-drawers that from place to place wander with banners full of horse teeth to the impairing of Kind-Hart's occupation"; and, again, "Sundry other could I set downe practised by our banner-bearers, but all is foppery, for this I find to be the only remedy for the tooth paine, either to have patience or to pull them out."

This pamphlet has given us some details of the dress of the Elizabethan tooth-drawer:

A woollen cap ornamented with a brooch, a relic of the time when pilgrims, after paying homage at a saint's shrine, received a leaden token, the image of the saint, and a belt or necklace of teeth. His musical cry could be heard at all the fairs and markets of old England:

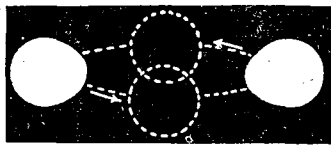
"Touch and go—Touch and go! Ha ye work for Kind-Hart the tooth-drawer."

# The Double Stars of Auriga

By the C.N. Astronomer

THE grand constellation of Auriga is now overhead in the evening between 8 and 10 o'clock, and is of great interest. Auriga represents a Shepherd or Waggoner who is driving a Goat and has in his arms two Kids. The constellation's brightest star, Capella, the Goat Star, was described in the C.N. for January 4, in which a map of the chief stars of Auriga may be found.

The bright star a little to the east of Capella is Beta in Auriga; also composed of two suns but of very different character and much hotter surfaces. These suns are about 6,000,000 times farther away than our Sun. Once about every four days one sun passes in front of the other, and so their light is diminished. Yet, owing to their



enormous distance, we do not see this until some 96 years later.

The diameter of each of these two suns—that is, about 2,000,000 miles—is about  $2\frac{1}{2}$  times greater than that of our Sun, and as an average of only 7,700,000 miles separates them from centre to centre, each permanently raises an enormous tide on the other, their gravitational pull causing each sun to appear egg-shaped as shown in the drawing.

Were we as near to our own Sun, a marvellous series of changes would be presented as they revolved round their common centre. When one passed in front of the other they would be seen foreshortened and therefore would appear round, as shown by the broken circles in the drawing; then, as they receded from each other they would gradually assume their egg-shaped appearance. While they together normally radiate 109 times more light than our Sun, this is reduced by about one-twelfth when one is passing in front of the other.

Zeta in Auriga, which represents one of the imaginary Kids of the ancient astronomers, is also composed of two suns. One is a "giant" sun, having a diameter about 200 times greater than that of our Sun, or about 175,000,000 miles. The other, which revolves round the giant central sun like a colossal fiery planet, has a diameter of about 10,000,000 miles. These suns are very much farther apart than those of Beta, the smaller sun taking 2 years and 243 days to complete the journey round the large central sun, which also travels in a much smaller orbit in the same time.

Zeta appears so faint and small because of its vast distance, about 1086 light-years' journey. Nevertheless, it has been discovered spectroscopically that the great central sun periodically eclipses the smaller one, which is much hotter and more brilliant, the remarkable effect being produced of the small brilliant one shining through the great revolving mass of fire-mist which covers to a great depth of many millions of miles the "giant" sun of Zeta in Auriga.

G. F. M.

*"It's time you had a*  
**BSA**  
*-full marks for smartness every day!*

B.S.A. Cycles Ltd., Birmingham, 11.

## BEDTIME CORNER

### Pip & the Snowman

DON built such a splendid snowman in the garden, tall and fat, in its mouth a pipe he planted, on its head he placed a hat. Pip the Puppy barked in anger when he saw the snowman there. "Who are you?" he asked the stranger. "Why do you just stand and stare?" When the snowman made no answer, Pip barked crossly, "Answer me!" "Silly Pip," Don called out, laughing. "It's a snowman, can't you see?"

### JANUARY FUN



A walk in the snow

### JANET AND HER TRICKS

JANET loved to play pranks, and she did it so often that sometimes she was wrongly blamed.

Late for school one day, she went to have a look at the Form's pets while waiting for the prayers.

The white mice were her own special charges, and they knew her so well that they would nestle in her blazer pocket. She had just taken them out of their cage to stroke them when she heard the girls returning, and hastily thrust them back.

At the end of the first lesson the mistress always asked one of them to give a little talk, and it was Janet's turn that day.

Standing by the teacher's desk, she was just going to begin when a little white mouse jumped out of her blazer.

The mistress was very angry, and would not listen to Janet's explanation that it must have crept under her blazer unnoticed.

"It is just another of your tricks, Janet," she said, "and you will have to be punished."

If you get yourself a bad name, you must take the consequences.

### Morning Prayer

PLEASE, dear God, make me good today, and better tomorrow. Amen

## Would you like more pocket money?

Here is a chance for every boy and girl to do a good deed and at the same time get paid for it. In this way:—

Brooke Bond Coffee Essence bottles are so scarce that every empty one\* is needed. Will you collect all you can from friends and neighbours? Your grocer will pay you 1d. each.

You will be helping to solve a very real difficulty. Thank you.

**Brooke Bond**  
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A teaspoonful of Owbridge's each night guards against infection of throat & chest.

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## Genuine BRITISH NAVAL (25/-) Telescopic Gun Sight

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These Naval Telescopes, powerful day and night lenses with modern micrometer automatic range focus apparatus. Splendid object lens. Approx. 15" in length. Made to pick out objects with clarity and precision at many miles range. Made by famous instrument manufacturers. To clear at less than cost of material. 25/- ONLY. Post and package 1/6. Two or more carriage free. Don't miss this amazing offer.

EX-ARMY BELL TENTS, centre pole, all accessories. Thoroughly reconditioned. Sleeps 8. Height 9ft. 6ins.; circ. 44ft. £3 15s. complete. MARQUEES, 30ft. x 20ft. Height 14ft. £38 15s. complete. Also larger sizes.

HEADQUARTER AND GENERAL SUPPLIES LTD. (Dept. CN/CS/2), Excel House, Excel Court, Whitcomb St., Leicester Square, London, W.C.2

## YOUTH OF BRITAIN!

Do you know thousands of our beautiful wild creatures every year are hunted to a cruel death for fun?

Will you help to stop this barbarity?

Write for information "League Against Cruel Sports," 58, Maddox Street, London, W.1.

*Walters*  
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*The Children's Choice*



# THE BRAN TUB

## Jacko & Billy Receive a Visitor



FATHER and Mother Jacko had left Jacko to look after the house, so, tethering Billy, he went to get Chimp to help to pass the time. While he was gone a visitor called to whom Billy took an instant dislike. He lowered his head and charged just as Jacko came round the corner. "It's all right," he cried. "He won't hurt you." But the visitor was taking no chances. "All the same I'll call again," he shouted as he dashed through the gate.

### NEAREST HIS HEART

"I'm glad you've got your football colours, son, but remember you mustn't neglect your work for play."

"Well, Father, you never cheer me when you hear me reciting Cicero like you do when I score a goal."

### Pithy Proverb

KEEP your tents separate, but bring your hearts together.

### RODDY



"I say, Mummy, you know your 26-piece dinner set—well, I'm afraid it's a 27-piece now!"

## The Children's Hour

BBC programmes from Wednesday, January 15, to Tuesday, January 21.

WEDNESDAY, 5.0 Benoit the Cook: Concert by the BBC Welsh Orchestra. Northern Ireland, 5.0 From Different Angles—a discussion between children and grown-ups on current topics.

THURSDAY, 5.0 Sir Isumbras at the Ford (Part 2). Scottish, 5.0 All Aboard the Barge—Part 1 of a new serial story: Mr Simister Appears Again. Welsh, 5.30 Sugar and Spice and All That's Nice: Sports Roundabout.

FRIDAY, 5.0 The Princess and the Goblins (Part 2). 5.40 Pigeon Post.

SATURDAY, 5.0 Songs sung by the Czechoslovak Youth Club: Boots in Cream—a story. Midland, 5.0 Midland Magazine, with news, gramophone records, and competitions: Children's party from Bir-

### Family Coach Up-to-Date

THE old game of Family Coach is now the Pilot and His Plane, the storyteller being the pilot and the rest of the players parts of his plane or the objects he sees as he flies along.

In front of the pilot is an empty chair, and the player who represents the first item spoken of as the tale develops, instead of getting up and turning round as in the old game, has to flit quietly across the room and sit in it until he changes places with the next one mentioned.

The one in the chair, though, must never make the first move, and the pilot's job is to keep an interesting story flowing so easily and quickly that most of the players miss their mark, and so pay forfeit.

### HIDDEN FOOTWEAR

In the following verse the names of six different types of footwear are concealed.

WHEN with swelling tonsils Rex indulged  
In fine fruit feasts, and also naps.  
Maybe he ate too much sometimes—

Such men may make that slip, perhaps.

When at a booth one day he saw Young Eric Logan. At full speed He rushed to him and said: "It is My wish, O Eric, that we feed."

Answer next week

tingham Town Hall; Up in the Morning Early—a country talk. West, 5.0 White Ruff—a story. 5.15 Loyal Servant—an episode in the life of Charles II.

SUNDAY, 5.0 The Wren's Nest—a story. 5.15 The Story of David (Part 3).

MONDAY, 5.0 Said the Cat to the Dog (No 20). 5.25 Ronald Gourlay (entertainer). 5.40 A book talk. Scottish, 5.40 The Birds in Winter.

TUESDAY, 5.0 The Mole Who Went to Wimbledon—a story: Vice-versa—a game on gramophone records. 5.40 A talk by the Sports Coach. Midland, 5.0 The Adventures of Sajo and Her Beaver People (Part 2); Tarrant Bailey (banjo). Northern Ireland, 5.0 Native Diary: Bran and the Son of the Knight. Scottish, 5.0 The Boy Archer of Deeside.

### CORRECTED

"THIS essay is excellent. Did your father help you with it?"

"Well, sir, he did start, but Mother had to write it all over again."

### Exercising Your Dog.

FOR those of you who live in the country, exercising your dog is an easy matter, for your pet can accompany you on your rambles, and when he is old enough and well trained he can be turned out on his own; but owners who live in crowded places should never allow this.

A town dog should be kept on the lead in busy roads, and his free exercise should be, whenever possible, on commons, in parks with unrestricted open spaces, or, if these are not near enough for everyday jaunts, in the quietest roads available.

### THE BIG QUERY

MR WEATHER CLERK, what will you bring?

The usual quite unusual thing  
This year every season,  
Or will you show reason,  
And to each let its true nature cling?

### Bedtime Story

"TIME for bed, Sally," called mother.

"Oh, dear, Mummie, why do you always tell me to go to bed when I'm not sleepy, and make me get up when I am?"

### FARMER GRAY EXPLAINS

Fresh Arrivals on the Lake. A great hubbub arose from the lake, where scores of hungry ducks and other water-birds jostled each other in their efforts to obtain the various scraps thrown into the water by kind-hearted people.

"Goodness!" exclaimed Ann. "I've never seen so many birds here before."

"Nor have I," agreed her brother. "I wonder where they have all come from?"

"It is the cold weather," explained Farmer Gray, hearing of the newcomers. "Many small ponds are frozen over, and consequently birds which frequent these ponds are compelled to find larger stretches of water which freeze less quickly."

### Other Worlds

IN the evening Saturn and Uranus are in the south-east. In the morning Venus and Jupiter are in the south-east. The picture shows the Moon as it may be seen at seven o'clock on the morning of Wednesday, January 15.



### PUZZLE LIMERICK

SAID two hikers whose surname was . . . .

Our . . . . we could do with at least,

So, their hunger to . . . . Took a . . . . by a gate

Where blackberries grew, for a feast.

Complete this verse with four words made up of the same four letters differently arranged.

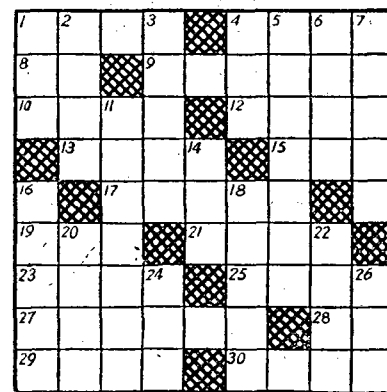
Answer next week

### Cross Word Puzzle

Reading Across. 1 Boiler fuel. 4 Assist. 8 Above and touching. 9 One deputed to represent the Pope. 10 Source of light, or of a flower. 12 Cupid. 13 Black substance rising in smoke. 15 Ontario.\* 17 Two. 19 Altitude.\* 21 That which falls victim to an enemy. 23 A kind of landing-stage. 25 Source of mighty power. 27 Roaming in quest of adventure. 28 Royal Engineers.\* 29 Beams. 30 Level.

Reading Down. 1 Stout, short-legged horse. 2 Burden. 3 An arm joint. 4 A period of time. 5 The lowest hereditary British title. 6 Famous public school. 7 England lost the first two. 11 A distribution of prizes by chance. 14 A faucet. 16 Used for writing and printing. 18 Angry. 20 Italian silver coin. 22 Old times. 24 Royal Astronomical Society.\* 26 Males.

Asterisks indicate abbreviations. Answer next week



### Catch Question

WHAT is it that the more you take from it the bigger it gets?

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### LAST WEEK'S ANSWERS

Puzzle Limerick. The missing words were: pale; peal; plea; leap. What is it? Radar.



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